

SUMMARY

- Research and development experience in digital systems
- Proficient in embedded system and full stack programming
- Strong electronic laboratory skills
- Management of a small team of engineers
- Experience in schematics design and PCB layout
- Collaboration with with engineers and suppliers from overseas (Fluent in English and Chinese)

SKILLS

- Hardware: Ambarella Camera SoC, Geo Semi Image Sensor, MT7620, MSP430, Raspberry Pi, TI SensorTag
- Applications: Visual Studio, OpenCV, Eclipse, Android Studio, Xcode, Git, Eagle CAD, Chromium
- Programming: JavaScript, C/C++, HTML&CSS, Python, Java
- Operating Systems: Linux, Windows, macOS, Android, iOS

EXPERIENCE

Product Engineering Supervisor (March 2019 – Present)

Product Engineer (February 2017 – March 2019)

Pro-Vision, Byron Center, MI

- Oversaw research and development of multiple digital camera and recording system projects
- Collaborated with internal teams to define the scope and ensure the technology meet requirements
- Programmed DVR to take photos and H.264 videos in MP4 format using Python and C/C++
- Created applications to control boot up procedure, firmware update, network and cellular connection, etc.
- Developed web interface and web service for DVR configuration using HTML, Javascript, and C/C++

Principal Hardware Engineer (May 2016 – January 2017)

Medforall - Information Technology and Service, Columbus, OH

- Led a close interdisciplinary team on hardware development, optimization, and validation
- Performed schematic design, symbol creation, and PCB layout for multiple projects
- Programmed environmental and motion sensing devices using Python and C/C++

Graduate Research Associate (August 2015 – May 2016)

Department of Electrical & Computer Engineering, Ohio State University, Columbus, OH

- Oversaw research and development of IoT projects for graduate student individual study course

ENGINEERING PROJECTS

Stop-Arm Camera Pro-Vision Video Systems (May 2019 – November 2019)

Developed a dual lens outside camera that records front and rear video with vehicle detection

Hybrid HD DVR Pro-Vision Video Systems (May 2019 – November 2019)

Developed a hybrid DVR system that supports both Analog cameras and Digital cameras

Drive Recorder Pro-Vision Video Systems (August 2017 – January 2018)

Developed a dual lens dash cam that records vehicle front and inside video in 1080P

Health Monitoring Hub Medforall (May 2016 – December 2016)

Developed a power supply and sensor board to power the Beaglebone-based hub with the motorized wheelchair battery and collect environmental and movement data from different sensors

Airborne Soil Moisture Mapping OSU & MIT Lincoln Laboratory (August 2014 – May 2016)

Developed a microcontroller board to collect GPS data and soil moisture data generated by a radiometer on a drone

Wearable Health Monitoring Device OSU & Fuse by Cardinal Health (June 2015 – May 2016)

Developed a monitoring device that collects user health data such as heart rate, muscle tension, etc.

EDUCATION

The Ohio State University, Columbus, OH

GPA: 3.3

M.S. Electrical & Computer Engineering (embedded systems), Graduation: May 2016

Pittsburg State University, Pittsburg, KS

GPA: 3.8

B.S. Electronics Engineering Technology, Mathematics Minor, Graduation: May 2014